



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,279	07/10/2003	Michael J. O'Phelan	279.094US3	2450
7590	07/26/2004		EXAMINER	
Schwegman, Lundberg, Woessner & Kluth, P.A. P.O. Box 2938 Minneapolis, MN 55402			NGUYEN, HA T	
			ART UNIT	PAPER NUMBER
			2812	

DATE MAILED: 07/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/617,279

Applicant(s)

O'PHELAN ET AL.

Examiner

Ha T. Nguyen

Art Unit

2812

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 38 and 39 is/are allowed.
- 6) ☒ Claim(s) 33-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7-10-3,1-30-4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Notice to applicant

1. Applicants' Amendment and Response to the Office Action mailed 03-03-04 has been entered and made of record .

Claim Rejections - 35 USC § 103

1a. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenwood, Jr. et al. (USPN 5949638, hereinafter "Greenwood").

Referring to Figs. 1-5 and related text, Greenwood discloses [Re Claim 33] a method forming an anode stack for a cylindrical capacitor, the method comprising: providing two or more conductive ribbons, each having an insulative coating, and winding portions of the conductive ribbons around an axis; [Re Claim 34] wherein each insulative coatings consists essentially of an oxide (See Summary); [Re Claim 35] wherein no more than one of every two conductive ribbons is joined to an anode tab; [Re Claim 36] wherein the anode tab is oriented transverse to a length dimension of each ribbon; [Re Claim 37] wherein no more than one of every three conductive ribbons is joined to an anode tab (see Fig. 2, # 21-23); and [Re Claim 40]

Art Unit: 2812

wherein the at least two of the conductive ribbons in electrical contact through their respective insulative coatings are arranged such that one of the two ribbons has a major surface overlying and contacting a major surface of the other of the two ribbons (see Figs. 2 and 4).

But it does not disclose expressly the use of sufficient force to establish electrical contact of two or more of the conductive ribbons through their respective insulative coatings.

However, it would have been obvious for a person of ordinary skill in the art to use sufficient force to make good contact between the conductive ribbons to reduce internal resistance. In doing so it would be inherent that the conductive ribbons would contact through their respective insulative coatings because Greenwood also discloses that the different anode layers can engage along the irregular oxide, at least in some locations there is breaking through the oxide (see col. 4, lines 20-34).

Therefore, it would have been obvious to use Greenwood's teaching to obtain the invention as specified in claims 33-37 and 40.

Allowable Subject Matter

3. Claims 38 and 39 are allowed.

Claim 38 recites the limitations "wherein winding portions of the conductive ribbons around an axis with sufficient force to establish electrical contact of two or more of the conductive ribbons through their respective insulative coatings comprises: providing a dual anode lug capacitor winder; and operating the winder at a tension setting of 1.5 for at least two of the conductive ribbons".

These features in combination with the other elements of the claims are neither disclosed nor suggested by the prior art of record.

Claim 39 depends from claim 38, it is allowed for the same reason.

Response to Amendment

4. Applicants' arguments with regard to the rejections under 35 U.S.C. 103 have been fully considered, but they are not deemed to be persuasive for at least the following reasons.

Applicants argued that Greenwood appear to dissuade one of skill from attempting to further reduce internal resistance and that the reference appears devoid of any reference or connotation of intentional breaking through oxide to provide any electrical contact. The examiner disagreed, the statement "acceptable internal resistance" by itself does not dissuade or

Art Unit: 2812

motivate a person to improve the capacitor internal resistance, however a person of ordinary skill in the art is well aware of the importance of the effect of the internal resistance of the capacitor in the quality and performance of the capacitor. Besides, Greenwood teaches a process for making a capacitor suitable for use in implantable medical devices (see col. 2, lines 33-36) where size is an important factor in the capacitor design. Greenwood's capacitor is designed to maximize capacitance achievable in a defined volume, which is preferably as small as possible (see col. 2, lines 26-58 and col. 7, lines 21-34). In such an environment, the anode, cathode, and separator layers are wound together, as tight as reliably possible for optimum performance. It is inherent that the anode layers contact through the irregular oxide layer of the etched or roughened anode layers, at least at some of the point of breakage because Greenwood teaches that to prevent contact between a cathode layer to adjacent anode layers, it is preferable to have two layers of kraft dielectric separator layers, which are relatively smoother than the sharp edge of the roughened or etched metallic foils (see par. bridging cols. 8 and 9).

Therefore Greenwood does make obvious all the limitations of claims 33-37.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ha Nguyen whose telephone number is (571) 272-1678. The

Art Unit: 2812

examiner can normally be reached on Monday-Friday from 8:30AM to 6:00PM, except the first Friday of each bi-week. The telephone number for Wednesday is (703) 560-0528.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Neibling, can be reached on (571) 272-1679. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



Ha Nguyen

Primary Examiner

07- 23 - 04